Prealgebra 8th edition Bittinger Test Bank

SKU: 9780135182567-TEST-BANK

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

Answer the question.

1) What does the digit 7 mean in the number 247,189?
A) 7 hundred thousands
B) 7 thousands
C) 7 hundreds
D) 7 ten thousands

Answer: B

2) What does the digit 4 mean in the number 247,189?
A) 4 hundred thousands
B) 4 hundreds
C) 4 thousands
D) 4 ten thousands

Answer: D

3) What does the digit 2 mean in the number 247,189?
A) 2 ten thousands
B) 2 thousands
C) 2 hundreds
D) 2 hundred thousands

Answer: D

4) What does the digit 4 mean in the number 189,247?
A) 4 ones
B) 4 tens
C) 4 thousands
D) 4 hundreds

Answer: B

5) What does the digit 2 mean in the number 189,247?
A) 2 thousands
B) 2 hundred thousands
C) 2 tens
D) 2 hundreds

Answer: D

6) What does the digit 7 mean in the number 189,247?
A) 7 tens
B) 7 thousands
C) 7 ones
D) 7 hundreds

Answer: C

7) What does the digit 3 mean in the number 301,475?
A) 3 hundreds
B) 3 thousands
C) 3 ten thousands
D) 3 hundred thousands

Answer: D

8) What does the digit 0 mean in the number 301,475?
A) 0 ones
B) 0 hundred thousands
C) 0 ten thousands
D) 0 thousands

Answer: C

9) What does the digit 4 mean in the number 301,475?
A) 4 hundred thousands
B) 4 tens
C) 4 thousands
D) 4 hundreds

Answer: D

10) What does the digit 9 mean in the number 890,236?
A) 9 thousands
B) 9 ten thousands
C) 9 hundred thousands
D) 9 hundreds

Answer: B

Fill in the digits for the given place values in the following whole number.

11) 5741
thousands __
tens __
A) Thousands 7, tens 1 B) Thousands 5, tens 4 C) Thousands 7, tens 4 D) Thousands 5, tens 1
Answer: B

12) 4795
hundreds __
ones __
A) Hundreds 7, ones 9 B) Hundreds 9, ones 5 C) Hundreds 7, ones 5 D) Hundreds 4, ones 7
Answer: C

13) 73,654
ten thousands __
ones __
A) Ten thousands 7, ones 4 B) Ten thousands 5, ones 6
C) Ten thousands 3, ones 4 D) Ten thousands 7, ones 3
Answer: A

14) 86,931
ten thousands __
hundreds __
A) Ten thousands 8, hundreds 9 B) Ten thousands 3, hundreds 9
C) Ten thousands 6, hundreds 1 D) Ten thousands 8, hundreds 6
Answer: A

15) 98,541
thousands __
tens __
A) Thousands 8, tens 4 B) Thousands 4, tens 1 C) Thousands 8, tens 9 D) Thousands 5, tens 1
Answer: A

16) 8,494,771
millions __
thousands __
A) Millions 7, thousands 7 B) Millions 8, thousands 4
C) Millions 4, thousands 4 D) Millions 8, thousands 9
Answer: B

17) 2,466,586
hundred thousands __
tens __
A) Hundred thousands 4, tens 6 B) Hundred thousands 2, tens 8
C) Hundred thousands 4, tens 8 D) Hundred thousands 6, tens 5
Answer: C

18) 5,859,686,968
billions __
millions __
A) Billions 9, millions 6
B) Billions 8, millions 9
C) Billions 9, millions 5
D) Billions 5, millions 9

Answer: D

Write expanded notation.

19) 378
A) 8 hundreds + 7 tens + 3 ones
B) 3 hundreds + 7 tens + 8 ones
C) 3 thousands + 7 hundreds + 8 tens
D) 378 hundreds

Answer: B

20) 4,392
A) 4 thousands + 3 hundreds + 9 tens + 2 ones
B) 4 hundreds + 9 tens + 3 ones
C) 4,392 thousands
D) 2 thousands + 9 hundreds + 3 tens + 4 ones

Answer: A

21) 53,279
A) 9 ten thousands + 7 thousands + 2 hundreds + 3 tens + 5 ones
B) 5 ten thousands + 3 thousands + 2 hundreds + 7 tens + 9 ones
C) 53,279 ten thousands
D) 5 thousands + 3 hundreds + 2 tens + 79 ones

Answer: B

22) 50,100
A) 5 ten thousands + 1 thousands
B) 510 ten thousands
C) 5 ten thousands + 1 hundreds
D) 5 thousands + 1 hundreds

Answer: C

23) 9,030
A) 903 thousands
B) 9 thousands + 3 tens
C) 9 hundreds + 3 ones
D) 9 ten thousands + 3 thousands

Answer: B

24) 10,930
A) 1 ten thousands + 9 hundreds + 3 tens
B) 1 thousands + 9 tens + 3 ones
C) 1 thousands + 9 hundreds + 3 ones
D) 1 ten thousands + 9 thousands + 3 tens

Answer: A

25) The distance between Vancouver, BC and Whitehorse, YT is 1,964 miles.
A) 1 thousand + 9 hundreds + 4 tens + 4 ones
B) 1 thousand + 9 hundreds + 6 tens + 4 ones
C) 1 thousand + 9 hundreds + 6 tens
D) 1 thousand + 9 hundreds + 1,964 ones

Answer: B

26) 60,389 videos are uploaded to the Internet each day.

A) 6 ten thousands + 0 thousands + 3 hundreds + 89 tens
B) 6 ten thousands + 0 thousands + 3 hundreds + 89 ones
C) 6 ten thousands + 0 thousands + 3 hundreds + 8 tens + 9 ones
D) 60 thousands + 3 hundreds + 8 tens + 9 ones

Answer: C

27) The population of an African country is 1,584,660.

A) 1 million + 5 hundred thousands + 8 ten thousands + 4 thousands + 6 hundreds + 6 tens + 0 ones
B) 1 million + 584 thousands + 6 hundreds + 6 tens + 0 ones
C) 1 million + 5 hundred thousands + 8 ten thousands + 4 thousands + 6 hundreds + 60 ones
D) 1 million + 5 hundred thousands + 84 ten thousands + 6 hundreds + 6 tens + 0 ones

Answer: A

28) The number of school children in a European country is 559,798.

A) 5 hundred thousands + 5 ten thousands + 9 thousands + 7 hundreds + 98 ones
B) 55 ten thousands + 9 thousands + 7 hundreds + 9 tens + 8 ones
C) 5 hundred thousands + 5 ten thousands + 9 thousands + 7 hundreds + 9 tens + 8 ones
D) 5 hundred thousands + 59 + thousands + 9 hundreds + 9 tens + 8 ones

Answer: C

Write the number in words.

29) 135,060

A) Thirteen thousand, five hundred six
B) One million, thirty–five thousand, sixty
C) Thirteen thousand, five hundred sixty
D) One hundred thirty–five thousand, sixty

Answer: D

30) 9,300,695

A) Nine million, three thousand, six hundred ninety–five
B) Nine million, thirty thousand, six hundred ninety–five
C) Nine million, three hundred thousand, six hundred ninety–five
D) Ninety–three thousand, six hundred ninety–five

Answer: C

31) 22,000,674

A) Twenty–two million, six hundred seventy–four
B) Twenty–two hundred million, six hundred seventy–four
C) Two million, two thousand, six hundred seventy–four
D) Twenty–two million, six thousand seventy–four

Answer: A

32) 64,568,009

A) Sixty–four million, five hundred thousand, sixty–eight hundred, nine
B) Sixty million, forty–five thousand, sixty–eight hundred and nine
C) Sixty–four million, five hundred sixty–eight thousand, nine
D) Sixty–million, five thousand sixty–eight hundred, nine

Answer: C

33) 235,060

A) Twenty–three thousand, five hundred sixty
B) Two million, thirty–five thousand, sixty
C) Twenty–three thousand, five hundred six
D) Two hundred thirty–five thousand, sixty

Answer: D

34) 4,200,091

A) Four million, two hundred ninety–one
B) Four million, twenty thousand, ninety–one
C) Forty–two thousand, ninety–one
D) Four million, two hundred thousand, ninety–one

Answer: D

35) 5168

A) Five hundred thousand, one hundred sixty–eight
B) Five million, one thousand, sixty–eight
C) Fifty–one thousand, sixty–eight
D) Five thousand, one hundred sixty–eight

Answer: D

36) 3072

A) Thirty thousand, seventy–two
B) Three thousand, seventy–two
C) Three hundred thousand, seventy–two
D) Three million, seventy–two

Answer: B

37) 24,807

A) Two thousand, four hundred eighty–seven
B) Two million, forty–eight thousand, seven
C) Twenty–four thousand, eight hundred seven
D) Two hundred forty–eight thousand, seven

Answer: C

38) 70,146

A) Seven million, one thousand, forty–six
B) Seven thousand, one hundred forty–six
C) Seventy thousand, one hundred forty–six
D) Seven hundred one thousand, forty–six

Answer: C

Write a word name for the number in the sentence.

39) There were 961 cars parked in the lot outside a large mall.

A) Six hundred nine
B) Nine hundred sixty–one
C) One hundred sixty–nine
D) Nine thousand sixty–one

Answer: B

40) The average population of the suburbs around a certain large city is 72,018.

A) Seventy–two hundred, eighteen
B) Seventy–two thousand, eighteen
C) Seventy–two thousand, one hundred eight
D) Seven thousand, two hundred eighteen

Answer: B

41) The control center was suddenly unable to track the satellite when it reached a distance of 128,615 miles from the earth's surface.

A) One hundred twenty thousand, eighty–six hundred, fifteen
B) One hundred twenty–eight thousand, six hundred fifteen
C) Six hundred fifteen thousand, one hundred twenty–eight
D) One hundred twenty–eight million, six hundred fifteen

Answer: B

42) One of the statistics to come out of the election was that 45,826,498 people, or about half the population, cast votes.
A) Forty–five thousand, eight hundred twenty–six hundred, four hundred, ninety–eight
B) Forty–five million, eight hundred twenty–six thousand, four hundred ninety–eight
C) Forty–five billion, eight hundred twenty–six million, four hundred ninety–eight thousand
D) Forty–five million, eight hundred thousand, twenty–six hundred, four hundred ninety–eight

Answer: B

43) The programmers were working with a graphics file of 406,581,060 bytes.
A) Four hundred six billion, five hundred eighty–one million, sixty
B) Four hundred sixty million, five hundred eighty–one thousand, six hundred
C) Four hundred six thousand, five hundred eighty–one hundred, sixty
D) Four hundred six million, five hundred eighty–one thousand, sixty

Answer: D

44) Scientists were predicting the demise of the space colony as the population approached 600,040,000.
A) Six hundred forty million
B) Six hundred million, forty thousand
C) Six hundred million, forty hundred
D) Six hundred billion, forty million

Answer: B

45) Astronomers predicted that it would take 900,070,000,100 earth years for the newly found supernova to make one revolution around the center of its galaxy.
A) Nine hundred million, seventy thousand, one hundred
B) Nine hundred seventy thousand, one hundred
C) Nine hundred billion, seventy million, one hundred
D) Ninety billion, seven hundred million, one hundred thousand

Answer: C

46) The holder of the "magic number" 444,222,888,555 (which was generated during a college's lottery for distributing student housing) was eligible to choose from among the best dormitories.
A) Five hundred fifty–five million, eight hundred eighty–eight billion, two hundred twenty–two thousand, five hundred fifty–five
B) Four hundred forty–four billion, two hundred twenty–two million, eight hundred eighty–eight thousand, five hundred fifty–five
C) Four hundred forty–four million, two hundred twenty–two billion, eight hundred eighty–eight, five hundred fifty–five thousand
D) Eight hundred eighty–eight thousand, two hundred twenty–two billion, four hundred forty–four million, five hundred fifty–five

Answer: B

47) Repeating patterns in numbers like 400,040,004,000 held mystical significance for most of the members of the village.
A) Four hundred billion, forty million, four thousand
B) Four billion, four hundred million, forty thousand
C) Four hundred million, forty thousand, four
D) Forty billion, four hundred million, four

Answer: A

48) In rounding 400,000,001,000 to the highest place value, the "1" has no effect on the "4".
A) Four hundred million, one hundred
B) Four billion, one hundred thousand
C) Four hundred thousand, one hundred
D) Four hundred billion, one thousand

Answer: D

Rewrite the following number using digits.

49) Eight thousand, one hundred sixty–seven

A) 81,067 B) 810,067 C) 8167 D) 800,167

Answer: C

50) Thirty–two thousand, nine hundred five

A) 3295 B) 32,905 C) 320,905 D) 32,950

Answer: B

51) Seven thousand, six

A) 7006 B) 76,000 C) 7600 D) 7060

Answer: A

52) Forty–eight thousand, seventeen

A) 48,017 B) 4817 C) 47,180 D) 48,170

Answer: A

53) Six hundred thirty–eight thousand,
nine hundred ninety–seven

A) 638,977 B) 638,997 C) 638,997,000 D) 638,000

Answer: B

54) Two hundred six thousand, one hundred seven

A) 206,107 B) 2617 C) 207,106 D) 260,170

Answer: A

55) One hundred million, six thousand

A) 1,600,000 B) 1006 C) 106,000,000 D) 100,006,000

Answer: D

56) Ten million, three hundred fifty–four thousand,
two hundred three

A) 135,423 B) 1,354,230 C) 10,354,203 D) 1,354,203

Answer: C

Write standard notation for the number in the sentence.

57) The Johnsons have driven their car forty seven thousand, eight hundred two miles in the last few years.

A) 47,802 B) 4,782 C) 47,820 D) 470,802

Answer: A

58) A certain exotic sportscar costs three hundred twelve thousand, five hundred ninety–five dollars.

A) 31,255 B) 312,595,000 C) 312,595 D) 3,205,950

Answer: C

59) The population of BigTown is one million, three hundred thirty–five thousand, five hundred six.

A) 133,506 B) 1,035,506 C) 13,035,560 D) 1,335,506

Answer: D

60) Don figured out that he had lived two billion, five hundred eighty–two million seconds.
A) 2,582,000,000 B) 2,582,000,000,000 C) 2,000,582,000 D) 2,582,000
Answer: A

61) The volume of water in the lake is seven billion, eight hundred twenty–one million, ninety–four thousand, six hundred thirteen gallons.
A) 7,821,940,613 B) 7,000,821,094,613 C) 782,194,613 D) 7,821,094,613
Answer: D

62) The distance between two stars is four trillion, three hundred seventeen billion, nine hundred eighty–eight million miles.
A) 4,317,988,000,000 B) 4,317,988,000,000,000
C) 4,317,988 D) 4,317,988,000
Answer: A

Add.

63)
$$\begin{array}{r} 49 \\ +\ 32 \\ \hline \end{array}$$

A) 82 B) 71 C) 80 D) 81
Answer: D

64)
$$\begin{array}{r} 88 \\ +\ 66 \\ \hline \end{array}$$

A) 155 B) 154 C) 153 D) 144
Answer: B

65)
$$\begin{array}{r} 881 \\ +\ 177 \\ \hline \end{array}$$

A) 1,524 B) 1,624 C) 1,658 D) 1,058
Answer: D

66)
$$\begin{array}{r} 9{,}319 \\ +\ 4{,}862 \\ \hline \end{array}$$

A) 13,081 B) 13,171 C) 14,181 D) 13,181
Answer: C

67)
$$\begin{array}{r} 326 \\ +\ 74 \\ \hline \end{array}$$

A) 390 B) 1,066 C) 401 D) 400
Answer: D

68) $\begin{array}{r} 1{,}115 \\ +\ 409 \\ \hline \end{array}$

A) 5,205 B) 1,514 C) 1,524 D) 1,424

Answer: C

69) $\begin{array}{r} 58{,}944 \\ +\ \ 164 \\ \hline \end{array}$

A) 59,008 B) 59,108 C) 59,118 D) 60,584

Answer: B

70) $\begin{array}{r} 27{,}805 \\ +\ \ 3{,}471 \\ \hline \end{array}$

A) 62,515 B) 31,476 C) 30,276 D) 31,276

Answer: D

71) $\begin{array}{r} 68{,}821 \\ +\ 53{,}528 \\ \hline \end{array}$

A) 121,349 B) 121,249 C) 122,349 D) 132,349

Answer: C

72) $\begin{array}{r} 40{,}055 \\ +\ 24{,}853 \\ \hline \end{array}$

A) 85,008 B) 64,898 C) 64,908 D) 288,585

Answer: C

73) 452 + 142

A) 594 B) 639 C) 495 D) 954

Answer: A

74) 2122 + 2423

A) 4554 B) 4644 C) 4545 D) 4357

Answer: C

75) 32,232 + 24,354

A) 56,767 B) 74,586 C) 56,586 D) 56,766

Answer: C

76) 552 + 193

A) 635 B) 645 C) 735 D) 745

Answer: D

77) 676 + 5,881

A) 6,457 B) 6,567 C) 5,557 D) 6,557

Answer: D

78) 772 + 17,162

A) 16,934 B) 17,934 C) 24,882 D) 19,364

Answer: B

79) 5,592 + 8,026

A) 13,518 B) 13,618 C) 13,608 D) 12,618

Answer: B

80) 63,238 + 94,797

A) 158,035 B) 148,035 C) 153,036 D) 168,035

Answer: A

81) 8,190 + 754 + 8

A) 8,962 B) 8,952 C) 8,937 D) 9,052

Answer: B

82) 13,327 + 65,777 + 5,215

A) 83,319 B) 82,314 C) 84,319 D) 119,319

Answer: C

83) 590 + 15 + 2,756 + 4

A) 3,225 B) 3,365 C) 3,351 D) 3,379

Answer: B

84) 2,012 + 544 + 1 + 78

A) 2,435 B) 2,735 C) 2,075 D) 2,635

Answer: D

85) 59,182 + 37 + 6,442 + 62,058

A) 127,719 B) 137,719 C) 127,619 D) 128,719

Answer: A

86)
$$\begin{array}{r} 4 \\ 9 \\ 7 \\ 4 \\ +\ 5 \\ \hline \end{array}$$

A) 27 B) 32 C) 29 D) 30

Answer: C

87)
$$\begin{array}{r} 14 \\ 49 \\ +\ 55 \\ \hline \end{array}$$

A) 119 B) 108 C) 118 D) 129

Answer: C

88)
$$\begin{array}{r} 38 \\ 46 \\ 4 \\ 60 \\ +\,48 \\ \hline \end{array}$$

A) 219 B) 232 C) 206 D) 196

Answer: D

89)
$$\begin{array}{r} 875 \\ 36 \\ +\,504 \\ \hline \end{array}$$

A) 1,545 B) 1,739 C) 1,415 D) 1,315

Answer: C

90)
$$\begin{array}{r} 4{,}150 \\ 7{,}665 \\ +\,2{,}687 \\ \hline \end{array}$$

A) 14,481 B) 14,502 C) 14,292 D) 13,502

Answer: B

91)
$$\begin{array}{r} 26{,}776 \\ 6{,}843 \\ +\,13{,}702 \\ \hline \end{array}$$

A) 48,421 B) 46,321 C) 47,421 D) 47,321

Answer: D

92)
$$\begin{array}{r} 650 \\ 852 \\ 367 \\ 193 \\ +\,672 \\ \hline \end{array}$$

A) 2,744 B) 2,734 C) 2,834 D) 2,844

Answer: B

93)
$$\begin{array}{r} 9{,}359 \\ 855 \\ 82 \\ +\,9{,}908 \\ \hline \end{array}$$

A) 19,194 B) 20,094 C) 20,204 D) 19,104

Answer: C

94)
$$\begin{array}{r} 4{,}484 \\ 612 \\ 20 \\ +\ 9{,}888 \\ \hline \end{array}$$

A) 14,894 B) 13,904 C) 13,994 D) 15,004

Answer: D

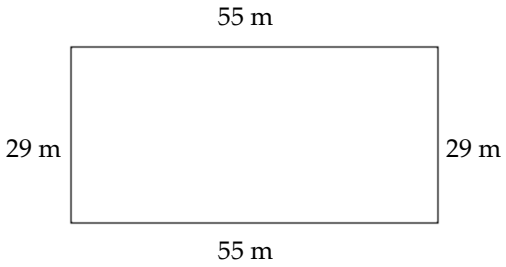
95)
$$\begin{array}{r} 75{,}081{,}281 \\ 4{,}050{,}519 \\ 177{,}693 \\ +\ 4{,}092{,}700 \\ \hline \end{array}$$

A) 83,390,063 B) 83,532,193 C) 83,402,193 D) 85,001,430

Answer: C

Find the perimeter of (the distance around) the figure.

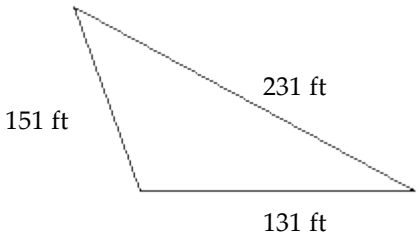
96)



A) 84 m B) 139 m C) 1,595 m D) 168 m

Answer: D

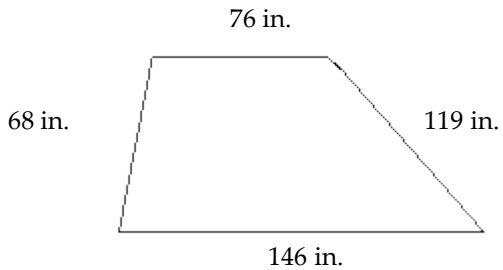
97)



A) 34,881 ft B) 503 ft C) 382 ft D) 513 ft

Answer: D

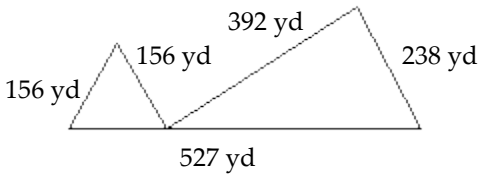
98)



A) 263 in. B) 409 ft C) 117 in. D) 409 in.

Answer: D

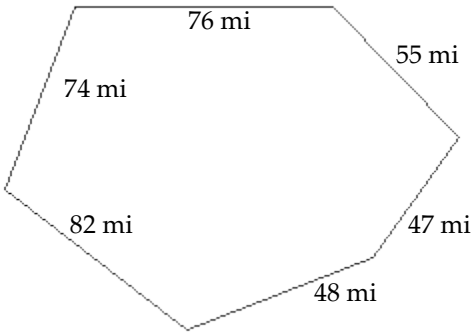
99)



A) 1313 yd B) 1233 yd C) 1231 yd D) 1469 yd

Answer: D

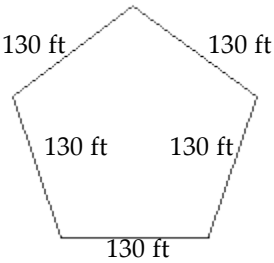
100)



A) 382 mi B) 308 mi C) 458 mi D) 402 mi

Answer: A

101)



A) 650 ft B) 665 ft C) 780 ft D) 16,900 ft

Answer: A

Subtract.

102) 89
− 21

A) 110 B) 66 C) 68 D) 88

Answer: C

103) 58
− 21

A) 79 B) 37 C) 47 D) 35

Answer: B

104) 599
– 324

A) 275 B) 267 C) 923 D) 175

Answer: A

105) 866
– 44

A) 910 B) 722 C) 814 D) 822

Answer: D

106) 6,656
– 144

A) 6,424 B) 6,512 C) 6,504 D) 512

Answer: B

107) 8,977
– 2,215

A) 6,762 B) 6,752 C) 8,762 D) 6,732

Answer: A

108) 9,789
– 1,541

A) 8,166 B) 8,248 C) 8,246 D) 9,248

Answer: B

109) 79,987
– 14,151

A) 65,734 B) 65,836 C) 65,834 D) 69,836

Answer: B

110) 89,878
– 4,232

A) 85,646 B) 89,646 C) 85,582 D) 85,642

Answer: A

111) 84 – 12

A) 82 B) 72 C) 92 D) 67

Answer: B

112) 893 – 210

A) 683 B) 693 C) 667 D) 783

Answer: A

113) 985 – 86

A) 911 B) 999 C) 899 D) 889

Answer: C

114) 7,674 – 3,044

A) 4,590 B) 4,630 C) 4,720 D) 5,130

Answer: B

115) 34,088 – 16,622

A) 17,366 B) 18,866 C) 17,466 D) 17,866

Answer: C

116) 25,959 – 6,686

A) 19,273 B) 18,973 C) 27,093 D) 23,273

Answer: A

117) 66,203 – 5,503

A) 60,700 B) 68,520 C) 61,000 D) 64,700

Answer: A

118)
$$\begin{array}{r} 94 \\ -\ 55 \\ \hline \end{array}$$

A) 31 B) 39 C) 149 D) 99

Answer: B

119)
$$\begin{array}{r} 75 \\ -\ 38 \\ \hline \end{array}$$

A) 27 B) 47 C) 113 D) 37

Answer: D

120)
$$\begin{array}{r} 735 \\ -\ 255 \\ \hline \end{array}$$

A) 470 B) 990 C) 380 D) 480

Answer: D

121)
$$\begin{array}{r} 812 \\ -\ 88 \\ \hline \end{array}$$

A) 724 B) 624 C) 900 D) 720

Answer: A

122)
$$\begin{array}{r} 2{,}975 \\ -\ 386 \\ \hline \end{array}$$

A) 589 B) 2,589 C) 2,439 D) 2,579

Answer: B

123) 5,626
− 5,164

A) 414 B) 5,462 C) 454 D) 462

Answer: D

124) 6,197
− 1,922

A) 4,271 B) 4,275 C) 4,231 D) 5,275

Answer: B

125) 74,117
− 48,684

A) 25,425 B) 25,405 C) 33,433 D) 25,433

Answer: D

126) 51,145
− 6,565

A) 50,580 B) 44,570 C) 44,490 D) 44,580

Answer: D

Multiply.

127)
53
× 6

A) 308 B) 309 C) 418 D) 318

Answer: D

128)
881
× 6

A) 5,296 B) 5,386 C) 5,286 D) 5,186

Answer: C

129) $8 \cdot 64$

A) 482 B) 492 C) 612 D) 512

Answer: D

130) $5 \cdot 527$

A) 2,735 B) 2,645 C) 2,535 D) 2,635

Answer: D

131) 2(5,968)

A) 11,946 B) 11,836 C) 11,936 D) 12,036

Answer: C

132)
$$\begin{array}{r} 100 \\ \times\ 6 \\ \hline \end{array}$$

A) 700 B) 6,000 C) 60 D) 600

Answer: D

133)
$$\begin{array}{r} 1000 \\ \times\ 24 \\ \hline \end{array}$$

A) 2,400 B) 240,000 C) 240 D) 24,000

Answer: D

134)
$$\begin{array}{r} 60 \\ \times\ 4 \\ \hline \end{array}$$

A) 250 B) 230 C) 240 D) 220

Answer: C

135)
$$\begin{array}{r} 400 \\ \times\ 8 \\ \hline \end{array}$$

A) 3,200 B) 4,200 C) 3,100 D) 2,200

Answer: A

136)
$$\begin{array}{r} 700 \\ \times\ 600 \\ \hline \end{array}$$

A) 420,000 B) 419,000 C) 430,000 D) 421,000

Answer: A

137)
$$\begin{array}{r} 98{,}000 \\ \times\ 6{,}000 \\ \hline \end{array}$$

A) 587,999,000 B) 588,000,000 C) 588,001,000 D) 587,999,501

Answer: B

138)
9,600
× 500

A) 4,801,000 B) 4,799,501 C) 4,799,000 D) 4,800,000

Answer: D

139) (16)(19)

A) 314 B) 304 C) 294 D) 404

Answer: B

140)
19
× 47

A) 883 B) 893 C) 993 D) 903

Answer: B

141) (56)(902)

A) 50,612 B) 50,512 C) 50,522 D) 50,502

Answer: B

142) (967)(86)

A) 83,262 B) 83,172 C) 83,162 D) 83,152

Answer: C

143)
351
× 584

A) 205,084 B) 204,984 C) 204,974 D) 204,994

Answer: B

144)
9,330
× 279

A) 2,603,170 B) 2,613,070 C) 2,603,070 D) 2,602,070

Answer: C

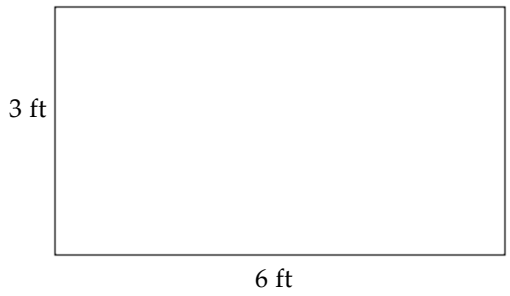
145)
1,039
× 5,900

A) 6,130,100 B) 6,129,100 C) 6,140,100 D) 6,130,200

Answer: A

Find the area of the region.

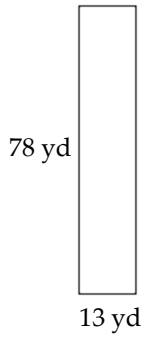
146)



A) 36 sq ft B) 18 sq ft C) 9 sq ft D) 27 sq ft

Answer: B

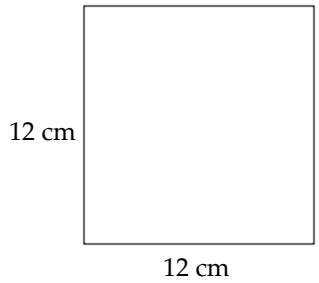
147)



A) 845 sq yd B) 1,014 sq yd C) 1,004 sq yd D) 91 sq yd

Answer: B

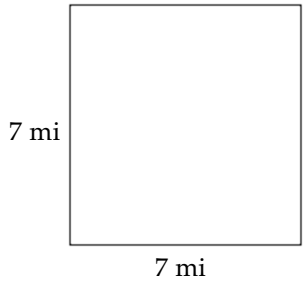
148)



A) 139 sq cm B) 144 sq cm C) 288 sq cm D) 48 sq cm

Answer: B

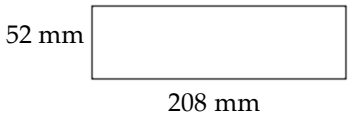
149)



A) 28 sq mi B) 45 sq mi C) 52 sq mi D) 49 sq mi

Answer: D

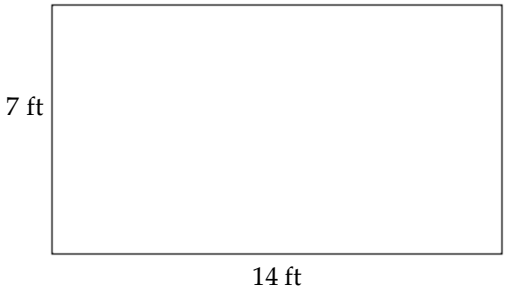
150)



A) 520 sq mm B) 10,806 sq mm C) 10,816 sq mm D) 10,826 sq mm

Answer: C

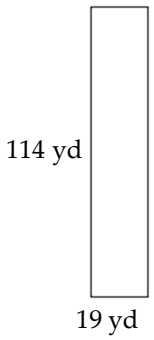
151) A homeowner is planning a vegetable garden and needs to know the area to determine how much compost to add. Find the area of the rectangular garden.



A) 49 sq ft B) 196 sq ft C) 98 sq ft D) 147 sq ft

Answer: C

152) A section of property is to be cleared and planted with grass. Find the area of the new lawn.



A) 1,805 sq yd B) 2,156 sq yd C) 133 sq yd D) 2,166 sq yd

Answer: D

Divide, if possible. If not possible, write "not defined."

153) $756 \div 7$

A) 107 R 6 B) 108 C) 108 R 6 D) Not defined

Answer: B

154) $2{,}856 \div 8$

A) 357 B) 359 C) 359 R 7 D) 357 R 1

Answer: A

155) $5\overline{)7{,}100}$

A) 1,420 R 4 B) 1,418 C) 1,420 D) 1,418 R 1

Answer: C

156) $\frac{321}{0}$

A) 65 B) 0 C) 321 D) Not defined

Answer: D

157) $\frac{321}{1}$

A) 1 B) 321 C) 64 R4 D) Not defined

Answer: B

158) $2327 \div 5$

A) 465 R4 B) 467 C) 465 D) 465 R2

Answer: D

159) $4\overline{)2658}$

A) 664 B) 663 R6 C) 664 R1 D) 664 R2

Answer: D

Divide.

160) $\frac{211}{211}$

A) 1 B) 2 C) 0 D) 211

Answer: A

161) $1{,}260{,}000 \div 100$

A) 1,260 B) 12,600 C) 126,000,000 D) 126,000

Answer: B

162) $11\overline{)935}$

A) 85 B) 86 R 1 C) 85 R 3 D) 86 R 5

Answer: A

163) $444 \div 38$

A) 9 R 7 B) 11 C) 11 R 26 D) 10 R 29

Answer: C

164) $6{,}188 \div 28$

A) 221 B) 222 C) 221 R 19 D) 222 R 18

Answer: A

165) $38\overline{)5{,}508}$

A) 147 R 30 B) 144 R 36 C) 144 D) 147 R 5

Answer: B

166) $39\overline{)17{,}728}$

A) 454 R22 B) 454 R19 C) 22 D) 454

Answer: A

167) $5{,}031 \div 184$

A) 27 B) 22 R 63 C) 27 R 63 D) 30 R 84

Answer: C

168) $370\overline{)241{,}594}$

A) 354 B) 652 R354 C) 652 D) 652 R284

Answer: B

169) $615\overline{)5{,}079{,}285}$

A) 8,249 R 85 B) 8,259 R 85 C) 8,249 D) 8,259

Answer: D

Round as indicated.

170) 188 to the nearest ten

A) 290 B) 190 C) 200 D) 180

Answer: B

171) 6,666 to the nearest ten

A) 6,770 B) 6,680 C) 6,670 D) 6,660

Answer: C

172) 5,749 to the nearest ten

A) 5,850 B) 5,740 C) 5,750 D) 5,760

Answer: C

173) 56,437 to the nearest ten

A) 56,430 B) 56,440 C) 56,540 D) 56,450

Answer: B

174) 600,435 to the nearest ten

A) 600,450 B) 600,420 C) 600,540 D) 600,440

Answer: D

175) 835 to the nearest hundred

A) 800 B) 900 C) 810 D) 700

Answer: A

176) 567 to the nearest hundred

A) 500 B) 590 C) 700 D) 600

Answer: D

177) 5,109 to the nearest hundred

A) 5,000 B) 5,110 C) 5,100 D) 5,200

Answer: C

178) 8,290 to the nearest hundred

A) 8,300 B) 8,200 C) 8,290 D) 8,400

Answer: A

179) 11,131 to the nearest hundred

A) 11,110 B) 11,200 C) 11,000 D) 11,100

Answer: D

Round to the nearest thousand.

180) 5156

A) 6000 B) 5200 C) 5160 D) 5000

Answer: D

181) 3636

A) 5000 B) 3600 C) 3640 D) 4000

Answer: D

182) 89,267

A) 90,000 B) 89,100 C) 99,000 D) 89,000

Answer: D

183) 90,006

A) 90,000 B) 90,100 C) 90,010 D) 91,000

Answer: A

184) 443,433

A) 443,400 B) 442,000 C) 440,000 D) 443,000

Answer: D

185) 9,417,476

A) 9,417,500 B) 9,420,000 C) 9,417,000 D) 9,418,000

Answer: C

Estimate the sum or difference by first rounding to the nearest ten.

186)
$$\begin{array}{r} 84 \\ +\ 71 \\ \hline \end{array}$$

A) 150 B) 200 C) 160 D) 155

Answer: A

187)
$$\begin{array}{r} 62 \\ 43 \\ 93 \\ 68 \\ +\ 69 \\ \hline \end{array}$$

A) 300 B) 330 C) 340 D) 335

Answer: B

188)
$$\begin{array}{r} 81 \\ -\ 45 \\ \hline \end{array}$$

A) 30 B) 36 C) 130 D) 40

Answer: A

189) 6,537
− 3,593

A) 2,944 B) 2,940 C) 2,950 D) 2,900

Answer: C

190) 463
− 17

A) 440 B) 400 C) 450 D) 446

Answer: A

Estimate the sum as indicated. Then answer the question.

191) Estimate the following sum by first rounding to the nearest ten. Does the estimate give you reason to doubt the stated sum?

48
63
21
+ 37
169

A) Estimate: 180 ; yes B) Estimate: 140 ; yes C) Estimate: 170 ; no D) Estimate: 160 ; no

Answer: C

192) Estimate the following sum by first rounding to the nearest ten. Does the estimate give you reason to doubt the stated sum?

49
51
76
+ 18
174

A) Estimate: 200 ; yes B) Estimate: 210 ; yes C) Estimate: 210 ; no D) Estimate: 200 ; no

Answer: A

193) Estimate the following sum by first rounding to the nearest ten. Does the estimate give you reason to doubt the stated sum?

537
23
489
+ 112
1161

A) Estimate: 1010 ; yes B) Estimate: 1160 ; no C) Estimate: 1230 ; yes D) Estimate: 1140 ; no

Answer: B

194) Estimate the following sum by first rounding to the nearest ten. Does the estimate give you reason to doubt the stated sum?

3864
2739
637
+ 5382
12,822

A) Estimate: 12,620 ; yes
B) Estimate: 12,850 ; no
C) Estimate: 12,820 ; no
D) Estimate: 12,910 ; yes

Answer: A

195) Estimate the following sum by first rounding to the nearest ten. Does the estimate give you reason to doubt the stated sum?

1864
5392
73
+ 5387
12,716

A) Estimate: 12,710 ; no
B) Estimate: 12,950 ; yes
C) Estimate: 12,950 ; no
D) Estimate: 12,710 ; yes

Answer: A

196) Estimate the following sum by first rounding to the nearest hundred. Does the estimate give you reason to doubt the stated sum?

3864
2739
637
+ 5382
12,822

A) Estimate: 12,900 ; yes
B) Estimate: 12,900 ; no
C) Estimate: 12,600 ; no
D) Estimate: 12,600 ; yes

Answer: D

197) Estimate the following sum by first rounding to the nearest hundred. Does the estimate give you reason to doubt the stated sum?

13,864
3 273
34,637
+ 732
52,506

A) Estimate: 52,600 ; yes
B) Estimate: 52,600 ; no
C) Estimate: 52,500 ; yes
D) Estimate: 52,500 ; no

Answer: D

198) Estimate the following sum by first rounding to the nearest hundred. Does the estimate give you reason to doubt the stated sum?

$$\begin{array}{r} 38{,}647 \\ 27{,}392 \\ 6373 \\ +\ 53{,}829 \\ \hline 138{,}241 \end{array}$$

A) Estimate: 138,200 ; no
B) Estimate: 138,200 ; yes
C) Estimate: 126,200 ; no
D) Estimate: 126,200 ; yes

Answer: D

199) Estimate the following sum by first rounding to the nearest hundred. Does the estimate give you reason to doubt the stated sum?

$$\begin{array}{r} 38{,}647 \\ 27{,}392 \\ 6371 \\ +\ 53{,}820 \\ \hline 126{,}230 \end{array}$$

A) Estimate: 126,400 ; yes
B) Estimate: 126,200 ; no
C) Estimate: 126,200 ; yes
D) Estimate: 126,400 ; no

Answer: B

200) Estimate the following sum by first rounding to the nearest hundred. Does the estimate give you reason to doubt the stated sum?

$$\begin{array}{r} 38{,}647 \\ 27{,}392 \\ 6371 \\ +\ 53{,}820 \\ \hline 122{,}230 \end{array}$$

A) Estimate: 126,200 ; yes
B) Estimate: 122,200 ; yes
C) Estimate: 122,200 ; no
D) Estimate: 126,200 ; no

Answer: A

Estimate the sum or difference by rounding each number to the nearest hundred.

201)
$$\begin{array}{r} 7{,}457 \\ +\ 9{,}164 \\ \hline \end{array}$$

A) 16,621
B) 16,600
C) 17,000
D) 16,700

Answer: D

202)
$$\begin{array}{r} 510 \\ 158 \\ 209 \\ 289 \\ +\ 370 \\ \hline \end{array}$$

A) 1,536 B) 1,540 C) 1,600 D) 1,500

Answer: C

203)
$$\begin{array}{r} 634 \\ -\ 357 \\ \hline \end{array}$$

A) 200 B) 300 C) 277 D) 1,000

Answer: A

204)
$$\begin{array}{r} 6{,}869 \\ -\ 1{,}636 \\ \hline \end{array}$$

A) 5,233 B) 5,300 C) 5,000 D) 5,200

Answer: B

205)
$$\begin{array}{r} 432 \\ -\ 254 \\ \hline \end{array}$$

A) 100 B) 700 C) 178 D) 200

Answer: A

206)
$$\begin{array}{r} 4{,}963 \\ +\ 7{,}466 \\ \hline \end{array}$$

A) 12,429 B) 12,000 C) 12,500 D) 12,400

Answer: C

207)
$$\begin{array}{r} 857 \\ -\ 321 \\ \hline \end{array}$$

A) 536 B) 600 C) 1,200 D) 500

Answer: B

208)
$$\begin{array}{r} 9{,}074 \\ -\ 3{,}849 \\ \hline \end{array}$$

A) 5,300 B) 5,000 C) 5,200 D) 5,225

Answer: A

Estimate the sum or difference by first rounding to the nearest thousand.

209)
$$\begin{array}{r} 7{,}684 \\ 9{,}699 \\ 7{,}750 \\ +\ 7{,}171 \\ \hline \end{array}$$

A) 32,400 B) 32,300 C) 33,000 D) 32,000

Answer: C

210)
$$\begin{array}{r} 4{,}418 \\ 3{,}376 \\ 6{,}906 \\ +\ 2{,}418 \\ \hline \end{array}$$

A) 16,000 B) 17,200 C) 17,100 D) 17,000

Answer: A

211)
$$\begin{array}{r} 64{,}264 \\ -\ 31{,}552 \\ \hline \end{array}$$

A) 32,700 B) 32,000 C) 32,800 D) 33,000

Answer: B

212)
$$\begin{array}{r} 88{,}585 \\ -\ 43{,}362 \\ \hline \end{array}$$

A) 45,100 B) 45,200 C) 46,000 D) 45,000

Answer: C

Estimate the answer by rounding as indicated.

213) Estimate by first rounding to the nearest ten.
$$\begin{array}{r} 18 \\ \times\ 99 \\ \hline \end{array}$$

A) 1,780 B) 120 C) 2,000 D) 1,782

Answer: C

214) Estimate by first rounding to the nearest hundred.
$$\begin{array}{r} 806 \\ \times\ 212 \\ \hline \end{array}$$

A) 170,872 B) 160,000 C) 1,000 D) 170,900

Answer: B

215) Estimate by first rounding to the nearest ten.
$599 \div 42$

A) 18 B) 27 C) 16 D) 15

Answer: D

216) Estimate by first rounding to the nearest ten.
363 ÷ 29
A) 25 B) 19 C) 11 D) 12
Answer: D

217) Estimate by first rounding to the nearest hundred.
6,504 ÷ 534
A) 11 B) 17 C) 14 D) 13
Answer: D

218) Estimate by first rounding to the nearest hundred.
24,762 ÷ 764
A) 31 B) 34 C) 62 D) 20
Answer: A

Solve the problem.

219) Andy wants to buy a refrigerator for $799, a stove for $459, and a dishwasher for $349. Round each cost to the nearest hundred to estimate the total cost.
A) $1,600 B) $1,700 C) $1,400 D) $1,500
Answer: A

220) The Pan family took a trip and traveled 565, 649, 439, 598, and 260 miles on 5 consecutive days. Round each distance to the nearest hundred and estimate the distance they traveled.
A) 2,400 miles B) 2,500 miles C) 2,600 miles D) 2,700 miles
Answer: B

221) Jane runs 24 miles a day. Estimate the total number of miles Jane runs in 48 days by rounding each number to the nearest ten.
A) 1,000 miles B) 1,500 miles C) 2,000 miles D) 800 miles
Answer: A

222) An appliance store sells 19 refrigerators a week. Estimate the total amount of money the store makes in a week if each refrigerator costs $728. Round the number of refrigerators to the nearest ten and the cost to the nearest hundred.
A) $16,000 B) $7,000 C) $8,000 D) $14,000
Answer: D

223) James' drive from home to work is 32 miles one way. If in a month he goes to work 21 days, then how many miles does he drive going from home to work and back in one month? Estimate by rounding both numbers to the nearest ten.
A) 1500 miles B) 1200 miles C) 1750 miles D) 900 miles
Answer: B

224) An assembly line can produce 476 bicycles each hour. Estimate the number of bicycles produced in 17 hours by rounding the number of bicycles to the nearest hundred and the number of hours to the nearest ten. Also find the exact number of bicycles produced.
A) Estimate: 8,160 bicycles; exact: 8,092 bicycles
B) Estimate: 8,160 bicycles; exact: 9,520 bicycles
C) Estimate: 10,000 bicycles; exact: 8,092 bicycles
D) Estimate: 240,000 bicycles; exact: 9,520 bicycles
Answer: C

225) Lisa stashed in an envelope on her dresser $454 each week for 9 weeks. Estimate the total amount she saved by rounding the weekly amount to the nearest hundred. Also find the exact amount she saved.

A) Estimate: $4,050; exact: $4,050
B) Estimate: $4,050; exact: $4,086
C) Estimate: $4,500; exact: $4,050
D) Estimate: $4,500; exact: $4,086

Answer: D

Use < or > for □ to write a true sentence. Draw a number line if necessary.

226) 37 □ 39

A) >
B) <

Answer: B

227) 39 □ 33

A) >
B) <

Answer: A

228) 33 □ 35

A) <
B) >

Answer: A

229) 47 □ 40

A) <
B) >

Answer: B

230) 0 □ 25

A) >
B) <

Answer: B

231) 0 □ 42

A) <
B) >

Answer: A

232) 580 □ 611

A) <
B) >

Answer: A

233) 740 □ 705

A) <
B) >

Answer: B

Use the given table or graph to write the inequality described.

234)

Lunch items	Calories	Grams of fat
1 glass of milk (2%)	120	5
Tuna salad	350	22
1 apple	80	1
1 bagel	165	1
Bowl of soup	155	3

Use an inequality to compare the number of calories in an apple and a bagel.

A) $80 > 165$ B) $80 < 165$ C) $155 < 165$ D) $80 < 155$

Answer: B

235)

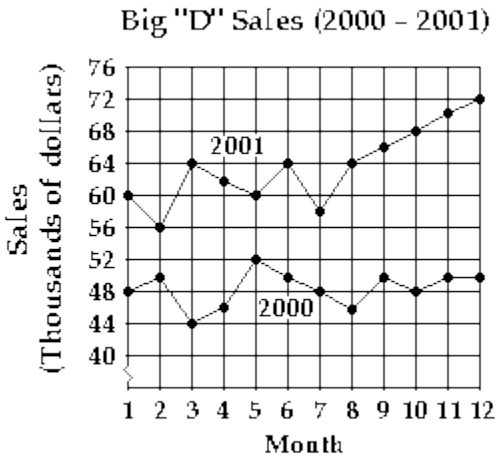
Lunch items	Calories	Grams of fat
1 glass of milk (2%)	120	5
Tuna salad	350	22
1 apple	80	1
1 bagel	165	1
Bowl of soup	155	3

Use an inequality to compare the number of grams of fat in tuna salad and a bowl of soup.

A) $3 > 22$ B) $155 < 350$ C) $22 > 3$ D) $350 > 155$

Answer: C

236) The sales figures for the Big "D" Company area shown below in a line plot.

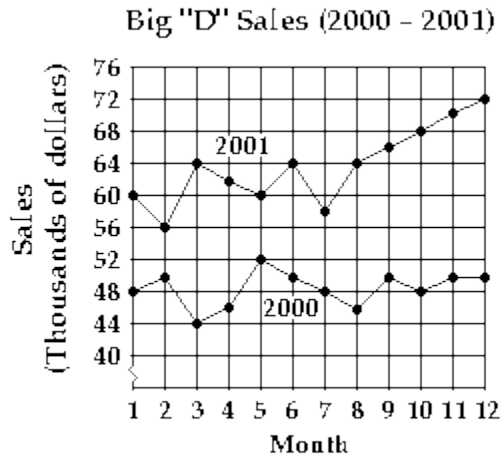


Use an inequality to compare the sales for July 2000 and July 2001.

A) $\$64{,}000 > \$50{,}000$ B) $\$46{,}000 < \$64{,}000$ C) $\$48{,}000 < \$58{,}000$ D) $\$50{,}000 < \$64{,}000$

Answer: C

237) The sales figures for the Big "D" Company area shown below in a line plot.

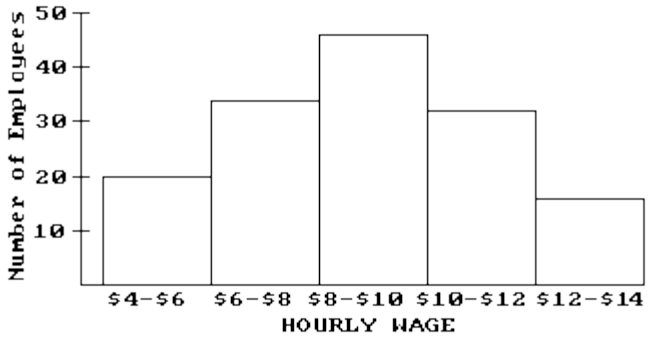


Use an inequality to compare the sales for January 2001 and December 2001.

A) \$70,000 > \$66,000 B) \$50,000 > \$48,000 C) \$48,000 < \$60,000 D) \$72,000 > \$60,000

Answer: D

238) The wages of the employees of a company are presented in this graph.

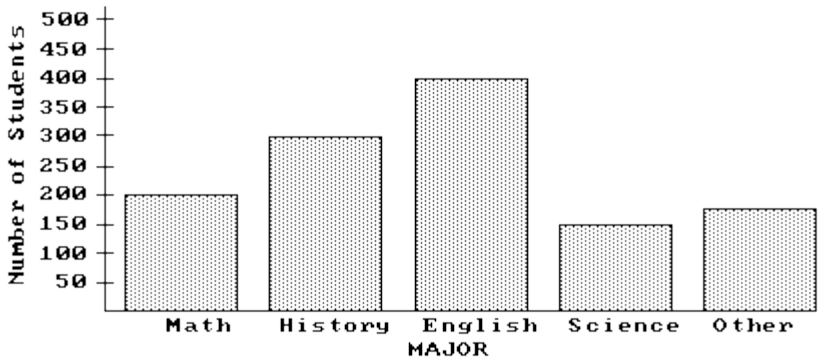


Use an inequality to compare the number of employees who make \$4–\$6 and those who make \$8–\$10.

A) 20 < 34 B) 20 < 45 C) 25 < 40 D) 30 > 20

Answer: B

239) The bar graph below shows the number of students by major in the College of Arts and Sciences.



Use an inequality to compare the number of math and english majors.

A) $300 < 400$ B) $200 > 150$ C) $300 > 200$ D) $400 > 200$

Answer: D

Solve by trial.

240) $x + 0 = 8$

A) 10 B) 0 C) 7 D) 8

Answer: D

241) $x + 2 = 11$

A) 8 B) 9 C) 11 D) 13

Answer: B

242) $x - 3 = 13$

A) 21 B) 6 C) 18 D) 16

Answer: D

243) $y \cdot 4 = 0$

A) 5 B) 4 C) 3 D) 0

Answer: D

244) $y \cdot 2 = 12$

A) 0 B) 6 C) 7 D) 5

Answer: B

245) $54 \div n = 18$

A) 1 B) 3 C) 5 D) 4

Answer: B

246) $72 \div n = 9$

A) 9 B) 6 C) 80 D) 8

Answer: D

Solve.

247) $x + 3 = 25$

A) 75 B) 28 C) 22 D) 12

Answer: C

248) $2 + y = 27$

A) 54 B) 23 C) 25 D) 29

Answer: C

249) $31 = 6 + x$

A) 31 B) 15 C) 25 D) 35

Answer: C

250) $x + 236 = 829$

A) 1,065 B) 593 C) 603 D) 195,644

Answer: B

251) $254 + y = 708$

A) 962 B) 454 C) 179,832 D) 452

Answer: B

252) $657 = 110 + x$

A) 537 B) 557 C) 547 D) 553

Answer: C

253) $4 \cdot x = 24$

A) 96 B) 6 C) 24 D) 5

Answer: B

254) $3 \cdot y = 75$

A) 27 B) 28 C) 25 D) 26

Answer: C

255) $135 = m \cdot 9$

A) 1,215 B) 15 C) 135 D) 9

Answer: B

256) $780 = 4 \cdot w$

A) 195 B) 3,120 C) 776 D) 4

Answer: A

257) $5 \cdot z = 2{,}715$

A) 539 B) 543 C) 545 D) 541

Answer: B

258) $451 = n \cdot 11$

A) 4,961 B) 440 C) 451 D) 41

Answer: D

259) $18 \cdot x = 1{,}476$

A) 77 B) 79 C) 82 D) 81

Answer: C

260) $124 \cdot m = 19{,}716$

A) 19,591 B) 160 C) 159 D) 19,592

Answer: C

261) $x = 4{,}098 + 4{,}169$

A) 8,167 B) 9,267 C) 8,230 D) 8,267

Answer: D

262) $x = 22{,}393 + 12{,}396$

A) 34,846 B) 33,789 C) 34,689 D) 34,789

Answer: D

263) $x = 722 - 316$

A) 1,038 B) 416 C) 396 D) 406

Answer: D

264) $8{,}046 - 2{,}443 = x$

A) 5,703 B) 5,603 C) 5,503 D) 10,489

Answer: B

265) $y = 3 \cdot 7$

A) 21 B) 19 C) 210 D) 31

Answer: A

266) $z = 72 \cdot 27$

A) 99 B) 1,944 C) 194,400 D) 19,440

Answer: B

267) $162 \div 54 = q$

A) 108 B) 13 C) 8,748 D) 3

Answer: D

268) $x = 144 \div 16$

A) 9 B) 2,304 C) 7 D) 90

Answer: A

Solve the problem.

269) During the last four months of a recent year, Annie's Natural Food Store reported the following sales.

September	$3,346
October	$2,220
November	$3,511
December	$2,793

What were the total sales over this period?

A) $11,980 B) $11,970 C) $11,880 D) $11,870

Answer: D

270) During the last four months of a recent year, Annie's Natural Food Store reported the following sales.

September	$2,817
October	$2,103
November	$2,938
December	$4,085

How much more were the sales in December than the sales in November?

A) $1,147 B) $6,923 C) $1,047 D) $7,023

Answer: A

271) Pete is driving across country from Boston to Seattle. He keeps a record of the distance that he drives each day.

Monday	421 miles
Tuesday	200 miles
Wednesday	306 miles
Thursday	283 miles
Friday	200 miles

How much further did he drive on Monday than on Friday?

A) 221 miles B) 421 miles C) 138 miles D) 621 miles

Answer: A

272) Pete is driving across country from Boston to Seattle. He keeps a record of the distance that he drives each day.

Monday	403 miles
Tuesday	328 miles
Wednesday	243 miles
Thursday	255 miles
Friday	303 miles

What was his total mileage for the first three days of the week?

A) 964 miles B) 1,074 miles C) 974 miles D) 1,532 miles

Answer: C

273) The height of the tallest building in the town of Chorlton is 1,264 feet. It is 116 feet taller than the second tallest building. What is the height of the second tallest building in Chorlton?

A) 1,147 feet B) 1,148 feet C) 1,380 feet D) 1,379 feet

Answer: B

274) An employee was paid $13,921 during the first half of last year. During the second half she was paid $18,765. How much more was her income during the second half?

A) $4,743 B) $4,844 C) $32,686 D) $32,585

Answer: B

275) The list price of a car is $13,643. The manufacturer offers a rebate of $767. What is the final price of the car?

A) $14,410 B) $12,776 C) $12,876 D) $14,310

Answer: C

276) The dimensions of a rectangular yard are 38 feet by 93 feet. What is its perimeter?

A) 169 feet B) 131 feet C) 3,534 feet D) 262 feet

Answer: D

277) Mark's typing speed is 64 words per minute. How many words can he type in 41 minutes?
A) 105 words B) 2,524 words C) 2,634 words D) 2,624 words

Answer: D

278) Mr. and Mrs. Gutierrez borrow $6,160 to buy a new car. The loan is to be paid off in 22 equal monthly payments. How much is each payment?
A) $28 B) $6,182 C) $280 D) $6,138

Answer: C

279) 187 chocolates are to be packed into boxes each of which will contain 8 chocolates. How many boxes of chocolates will there be? How many chocolates will be left over?
A) 23 boxes; no chocolates left over B) 22 boxes; 3 chocolates left over
C) 23 boxes; 3 chocolates left over D) 22 boxes; 4 chocolates left over

Answer: C

280) Each box of matches contains 240 matches. Boxes of matches are shipped in cartons. Each carton contains 5 boxes of matches. How many matches are in each carton?
A) 1,200 matches B) 48 matches C) 245 matches D) 120 matches

Answer: A

281) David's company has to ship 4,950 boxes of sprinklers. If a truck can hold 550 boxes, how many truckloads does he need to ship all the boxes?
A) 10 truckloads B) 9 truckloads C) 8 truckloads D) 7 truckloads

Answer: B

282) A spreadsheet contains 480 entries in a rectangular array which has 32 rows. How many entries are in each row?
A) 25 entries B) 15 entries C) 448 entries D) 15,360 entries

Answer: B

283) The balance in your checking account is $640. You write checks for $41, $46, and $148. You then deposit $135 from your paycheck. What is your new balance?
A) $540 B) $270 C) $1,010 D) $530

Answer: A

284) Susan's backyard is rectangular with dimensions 43 yd by 71 yd. Carlos's backyard is rectangular with dimensions 29 yd by 48 yd. How much larger is the area of Susan's backyard than the area of Carlos's backyard?
A) 1,661 yd^2 B) 4,445 yd^2 C) 3,053 yd^2 D) 74 yd^2

Answer: A

285) A map has a scale of 5 miles to the inch. How far apart in reality are two cities that are 20 inches apart on the map? How far apart on the map are two cities that, in reality, are 35 miles apart?
A) 100 miles; 7 inches B) 4 miles; 7 inches
C) 100 miles; 175 inches D) 4 miles; 175 inches

Answer: A

286) Danny buys 5 books at $38 each and pays for them with 10–dollar bills. How many $10 bills did it take?
A) 5 B) 190 C) 19 D) 180

Answer: C

287) A travel agent arranged a payment plan for a client. It required a down payment of $250 and 12 monthly payments of $705. What was the total cost of the plan?

A) $8,710 B) $8,560 C) $8,460 D) $8,610

Answer: A

288) A community garden contains 20 rectangular plots each measuring 6 yd by 9 yd. What is the total area available for gardening?

A) 1,080 yd^2 B) 600 yd^2 C) 54 yd^2 D) 1,100 yd^2

Answer: A

Write exponential notation.

289) $4 \cdot 4$

A) $2 \cdot 4$ B) 4^3 C) 2^4 D) 4^2

Answer: D

290) $6 \cdot 6 \cdot 6$

A) 6^3 B) $3 \cdot 6$ C) 3^6 D) 6^1

Answer: A

291) $2 \cdot 2 \cdot 2 \cdot 2$

A) 2^2 B) 8 C) 4^2 D) 2^4

Answer: D

292) $3 \cdot 3 \cdot 3 \cdot 3 \cdot 3$

A) 3^5 B) $5 \cdot 3$ C) 5^3 D) 3^0

Answer: A

293) $12 \cdot 12 \cdot 12 \cdot 12$

A) 12^1 B) 4^{15} C) 12^4 D) $4 \cdot 12$

Answer: C

294) $19 \cdot 19 \cdot 19 \cdot 19 \cdot 19$

A) 5^{15} B) $5 \cdot 5^{15}$ C) 19^5 D) $5 \cdot 19$

Answer: C

Evaluate.

295) 8^2

A) 64 B) 81 C) 256 D) 16

Answer: A

296) 7^3

A) 21 B) 343 C) 2,187 D) 216

Answer: B

297) 6^4

A) 216 B) 24 C) 1,296 D) 4,096

Answer: C

298) 4^5

A) 1,024 B) 4,096 C) 20 D) 625

Answer: A

Simplify.

299) $(5 + 4)^2$

A) 41 B) 21 C) 29 D) 81

Answer: D

300) $80 - (21 - 12)$

A) 9 B) 71 C) 59 D) 47

Answer: B

301) $360 \div (30 \div 6)$

A) 12 B) 355 C) 2 D) 72

Answer: D

302) $(15 - 10)^2 + (4 + 3)^2$

A) 150 B) 144 C) 50 D) 74

Answer: D

303) $2 \cdot 2 + 9(6 - 6) + 3$

A) 3 B) 55 C) 31 D) 7

Answer: D

304) $280 \div 14 - (5 + 4)$

A) 19 B) 15 C) 56 D) 11

Answer: D

305) $3 \cdot (5 + 3)^2 - 2 \cdot (6 - 4)^2$

A) 316 B) 560 C) 760 D) 184

Answer: D

306) $10^2 + 7 \cdot 6 - (11 + 5 \cdot 2)$

A) 121 B) 110 C) 141 D) 621

Answer: A

307) $320 - 3^4 \cdot 24 \div (4 \cdot 3 - 2 \cdot 2)$

A) 154 B) 717 C) 77 D) 474

Answer: C

308) $240 \div 5 - 4$

A) 240 B) 231 C) 44 D) 239

Answer: C

309) $5^2 + 4^2$

A) 41 B) 81 C) 36 D) 18

Answer: A

310) $25 + 13 \cdot 21$

A) 298 B) 59 C) 798 D) 346

Answer: A

311) $9 \cdot 5 - 5$

A) 0 B) 50 C) 40 D) 225

Answer: C

312) $9 \cdot 10 - 6 \cdot 5$

A) 2,700 B) 180 C) 60 D) 420

Answer: C

313) $78 - 3 \cdot 5 \cdot 2$

A) 750 B) 126 C) 68 D) 48

Answer: D

314) $6^3 \div 9 - 7$

A) 108 B) 27 C) 17 D) 214

Answer: C

315) $9^2 - 4 \cdot 2$

A) 154 B) 50 C) 90 D) 73

Answer: D

316) $6^2 + 4^2 \div 2^2$

A) 56 B) 25 C) 40 D) 13

Answer: C

317) $2^{14} \div 2^8 \cdot 2^2 \div 2^4$

A) 1 B) 1,024 C) 256 D) 16

Answer: D

Find the average.

318) Ages of patients (in years) in a clinic: 17, 4, 23, 17
(Round to the nearest whole number)

A) 4 years B) 14 years C) 15 years D) 17 years

Answer: C

319) Scores on a math test: 71 59 71 95 59

A) 70 B) 59 C) 71 D) 95

Answer: C

320) Monthly checking account fees: $15, $12, $7, $14, $6, $3, $6

A) $14 B) $6 C) $9 D) $8

Answer: C

Simplify.

321) $8 \times 7 + \{6 \div [8 - (3 + 2)]\}$

A) 59 B) 60 C) 57 D) 58

Answer: D

322) $81 \div 3 + \{8 \times [18 - (4 \times 2)]\}$

A) 110 B) 97 C) 107 D) 102

Answer: C

323) $[20 - (4 + 6) \div 2] - [1 + 6 \div 3]$

A) 12 B) 9 C) 7 D) 19

Answer: A

324) $(67 - 15) \times [(80 + 25 \div 5) - (7 \cdot 7 - 5 \cdot 5)]$

A) 3,229 B) 3,136 C) 3,272 D) 3,172

Answer: D

325) $5 \times \{(300 - 45 \div 5) - [3 \cdot 18 - (8 - 2 \cdot 3)]\}$

A) 1,145 B) 2,971 C) −305 D) 1,195

Answer: D

326) $\{[57 - 2 \cdot 4] - [84 \div (1 + 2)]\} \cdot 6$

A) 126 B) 162 C) 192 D) 114

Answer: A

SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.

Provide an appropriate response.

327) You go to the bank to cash three checks. The checks are for $33.48, $133.74, and $74.71. You are given $208.45 by the teller. Estimate to see if the amount given you seems to be correct. Does $208.45 seem to be correct? Explain your answer.

Answer: No; When the value of the checks is rounded to the nearest $10, the sum is not close to $208.45.

328) You go to the bank to cash three checks. The checks are for $36.74, $140.07, and $94.83. You are given $271.64 by the teller. Estimate to see if the amount given you seems to be correct. Does $271.64 seem to be correct? Explain your answer.

Answer: Yes; When the value of the checks is rounded to the nearest $10, the sum is close to $271.64.

329) Explain in your own words the commutative law of addition.

Answer: Numbers can be added in any order and have the same sum.

330) For any division sentence there is a corresponding multiplication sentence. For example, for the division statement $12 \div 4 = 3$, the corresponding multiplication sentence is $3 \times 4 = 12$. Consider the division problem $8 \div 0$. What do you think the answer is to this division problem? Consider the corresponding multiplication sentence. What conclusion do you arrive at? Explain your answer.

Answer: There is no number that when multiplied by 0 will equal 8. Division by 0 is undefined for any real number.

331) For any division sentence there is a corresponding multiplication sentence. For example, for the division statement $12 \div 4 = 3$, the corresponding multiplication sentence is $3 \times 4 = 12$. Consider the division problem $0 \div 0$. What do you think the answer is to this division problem? Consider the corresponding multiplication sentence. What conclusion do you arrive at? Explain your answer.

Answer: Because any number rather than just one number multiplied by 0 will equal 0, division by 0 is undefined.

332) Is division commutative? Explain your answer.

Answer: No. $a \div b$ does not always equal $b \div a$.

333) The expression $8 + (4 \div 2)$ contains parentheses. Are they necessary? Explain.

Answer: No. Without the parentheses the procedure would be the same. Division is done before addition. $8 + (4 \div 2) = 8 + 4 \div 2 = 10$.

334) The expression $(3 + 5) \div 2$ contains parentheses. Are they necessary? Explain.

Answer: Yes. Without the parentheses 5 would be divided by 2, then that answer would be added to 3. $(3 + 5) \div 2 = 4$ and $3 + 5 \div 2 = 5.5$.

Answer Key
Testname: UNTITLED1

1) B
2) D
3) D
4) B
5) D
6) C
7) D
8) C
9) D
10) B
11) B
12) C
13) A
14) A
15) A
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314) C
315) D
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317) D
318) C
319) C
320) C
321) D
322) C
323) A
324) D
325) D
326) A
327) No; When the value of the checks is rounded to the nearest $10, the sum is not close to $208.45.
328) Yes; When the value of the checks is rounded to the nearest $10, the sum is close to $271.64.
329) Numbers can be added in any order and have the same sum.
330) There is no number that when multiplied by 0 will equal 8. Division by 0 is undefined for any real number.
331) Because any number rather than just one number multiplied by 0 will equal 0, division by 0 is undefined.
332) No. $a \div b$ does not always equal $b \div a$.
333) No. Without the parentheses the procedure would be the same. Division is done before addition. $8 + (4 \div 2) = 8 + 4 \div 2 = 10$.
334) Yes. Without the parentheses 5 would be divided by 2, then that answer would be added to 3. $(3 + 5) \div 2 = 4$ and $3 + 5 \div 2 = 5.5$.